

American Petroleum Institute
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Monthly Statistical Report

Finance, Accounting, and Statistics Department

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SUMMARY

To an incurable pessimist, the moderation in the growth of total deliveries from nearly 12 percent, year to year, in January to over 5 percent for February might be taken as a serious setback. But by any other measure, February's growth in deliveries was still unusually strong.

All major products shared in the pattern of unusually large year-to-year increases. Gasoline deliveries rose a solid 3.2 percent, contrasting with growth for all of last year of only about 1.5 percent. Distillate and kerosine jet fuel deliveries continued strong as well, both rising by 10.0 percent, after substantial weather-related increases in January. Even residual fuel oil deliveries jumped nearly 18 percent, their fourth year-to-year increase in a row.

Although we believe the trend in underlying consumption growth has not been nearly so strong as that portrayed by the past two months' deliveries data, the strengthening economy has likely bolstered actual consumption to some degree. The trend in growth of total petroleum consumption, which rose only half a percent or so for last year as a whole, may more recently have been closer to 2 to 3 percent rate once unusual weather and other anomalies are taken into account.

Domestic crude oil production fell 115 thousand B/D, or 1.7 percent for February. Alaskan output declined only 2.1 percent, or about 35 thousand B/D, following January's modest increase, which had been the first year-to-year increase in a little over two years. In the lower 48, crude oil production slipped about 80 thousand B/D or 1.5 percent versus one year earlier.

Total imports rose a moderate 3.0 percent in February—with the gap between domestic supply and consumption filled in part by continued substantial inventory draws. February's 35 million barrel stock draw, nearly three times the average amount for the month, temporarily displaced more than a million B/D of imports. As a result of the draw, month-end total inventories stood at 980 million barrels, the lowest level for the month in twenty years.

At refineries, with continued strong deliveries of distillate fuel oil, output of this product rose over 14 percent from a year ago to its highest February level in seventeen years. Strong blending demand for kerosine jet fuel continued into February as well, resulting in a three-year February high of 1.4 million B/D for production of that product. Overall refinery activity, as measured by input to distillation units, was up 1.9 percent from last February.

PRODUCT SUPPLIED

Gasoline

STRENGTHENING ECONOMY ADDS TO INCREASED USAGE.

Growth in gasoline deliveries continued at a relatively strong pace in February, rising 3.2 percent from the same month one

year earlier. Although this is still greater than likely growth in actual consumption, recent strengthening in the economic climate may have nevertheless been adding to underlying consumption growth to some degree. With quarter-to-quarter GDP growth at the end of last year currently estimated at an annual rate of 7.5 percent, the economy so far in 1994 could have easily been ahead by 4 percent or so versus a year ago—a percent or so ahead of last year's average economic growth of 3 percent.

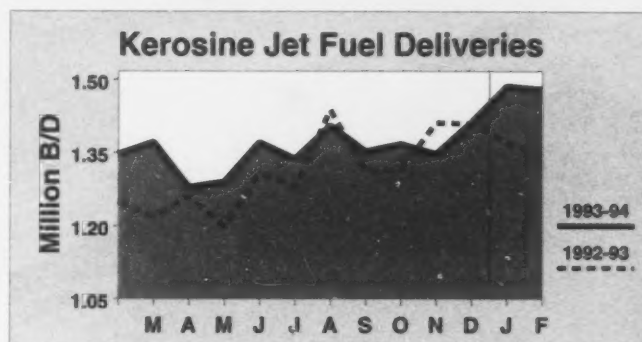
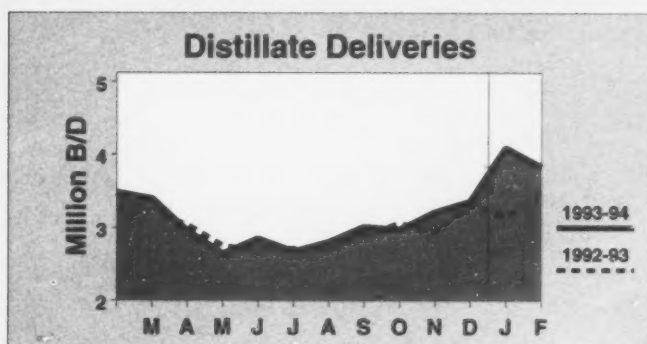
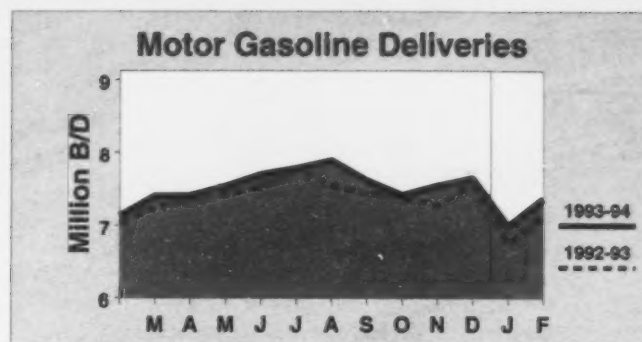
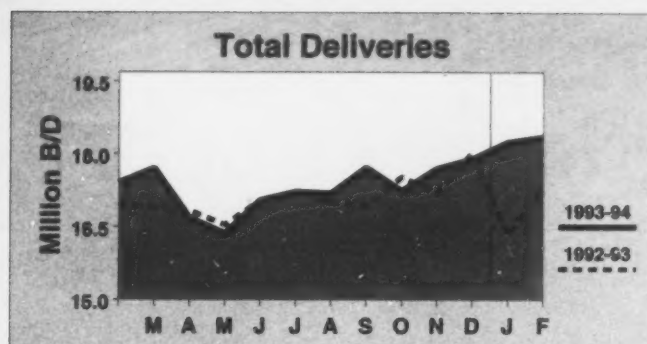
Furthermore, data on travel could also be interpreted as showing stronger growth in recent months than might be apparent from year-to-year comparisons alone. While the latest data available show that highway miles traveled during the fourth quarter averaged about 3 percent ahead of a year ago, on a seasonally-adjusted basis they suggest that since the middle of last year, growth may have been proceeding month to month at a 4 to 5 percent annual-

ized rate. If this trend has continued into early 1994, year-to-year growth in travel of 4 percent or more may have occurred so far this year, even with the inclement weather. If this has in fact been the case, it implies a trend in underlying growth of gasoline consumption of 2 to 2.5 percent. This contrasts with 1993's annual increase in gasoline deliveries of about 1.5 percent.

As for oxygenated gasoline, deliveries of this product jumped more than 55 percent from year ago levels, reflecting in part the more widespread requirements this season than last. Deliveries of oxygenated gasoline amounted to 1.9 million B/D in February.

API ESTIMATES

	FEBRUARY		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	18.3	5.4	18.3	8.6
Crude production	6.8	(1.7)	6.9	(1.1)
Total imports	8.2	3.0	8.0	0.5
Stocks (million bbl)	980	(3.9)	na	na



Distillate Fuel Oil
GROWTH STILL
STRONG IN FEBRUARY.

Deliveries of distillate fuel oil rose 10 percent in February versus a year ago—substantially less than the estimated 30 percent gain for January, but unusually strong nonetheless. Cold weather early in the month, combined with a probable need to restock wholesale and end-user inventories after January's severe cold, likely played a role in boosting February's deliveries.

The unusually cold weather that had beset the East in January continued into early February. Heating degree days in the Northeast for the first half of February averaged roughly 15 percent colder than normal and about the same amount against the year-ago period. But with the weather moderating significantly by the end of the month, February as a whole averaged about the same as last February both for the Northeast and for the nation as a whole.

The strengthening economy has likely added to growth for diesel fuels. The growth trend in highway freight demand, as best as can be estimated, has likely been running at an estimated 3 or 4 percent, and rail traffic for the month was up an estimated 5 percent. Growth in these and the remaining sectors suggest underlying growth in distillate fuel oil consumption on the order of 2 to 3 percent.

Deliveries of low-sulfur diesel amounted to over 1.7 million barrels per day during February, or 45 percent of total distillate deliveries.

Kerosine Jet Fuel
DELIVERIES JUMP
10 PERCENT.

Deliveries of kerosine-jet fuel during February were at an all-time high for the month, averaging 1.48 million B/D. This was an increase of 134 thousand B/D, or 10 percent over last February. The strong gains in January

combined with February's strong performance boosted the year-to-date growth to 9.1 percent. Given the winter snowstorms earlier in the month that caused several airports to close and airlines to cancel flights, the strength of February's deliveries is also believed to be the result of continued blending with diesel fuel and increased military liftings.

As was the case in January, cold temperatures in the Northeast and Midwest continued the need for blending jet-kerosine into diesel fuel to prevent the fuel from clouding, or forming crystals, which can lead to starting and stalling problems in diesel engines. The amount of jet-kerosine fuel required for blending purposes likely increased this February relative to last, thus contributing to the increase in deliveries.

Preliminary traffic reports from commercial airlines indicated that February's harsh weather had a significant impact on air travel. Based on these reports, we estimate that total miles flown declined by approximately 3-5 percent during February compared to a year ago. With respect to cargo traffic, it appears that the weather also limited activity in this segment, keeping growth in cargo ton miles at 2-3 percent. With limited commercial activity, we estimate that jet fuel consumption by commercial airlines declined a slight 1-2 percent between this February and last.

Military liftings of jet-kerosine continued to increase. Preliminary data from the Defense Fuel Supply Center for January indicated a year-to-year increase of 58 percent to 99 thousand B/D. Based on revised figures for December and the preliminary January data, we estimate that military liftings during February were in the range of 95-100 thousand B/D.

Residual Fuel Oil
FOURTH YEAR-TO-YEAR
GAIN IN A ROW.

Following on January's strong performance, February deliveries of residual fuel increased by 17.6 percent, year-to-year, to 1.3 million B/D. This was the fourth

consecutive year-to-year increase in resid deliveries, and after combining February's strong showing with January's robust growth, the resulting year-to-date increase was a substantial 15 percent.

Continuing cold temperatures and snowstorms in the early part of the month coupled with the need to replenish depleted end-user stocks held by electric utilities and industrial users were probably the main factors contributing to February's growth in resid deliveries. With the harsh weather persisting, electric utilities and industrial users may have been prompted to continue using resid to meet the increased demand for electricity output. In addition, with resid stocks held by these users already at low levels due to January's severe cold, it is likely that fuel buyers may have taken advantage of lower resid prices and increased their incremental purchases for inventory.

In the key Eastern markets of Boston and New York, resid remained a strong alternative to natural gas during February as city gate prices of natural gas (the price paid by utilities for natural gas) went as high as \$4.00 per million BTU. Although city gate prices eventually dropped to approximately \$3.00 per million BTU by month's end, resid prices hovered at \$3.00 per million BTU for much of the month before dipping to \$2.80 per million BTU. In Florida, another key market for resid, February resid prices at Jacksonville averaged \$2.12 per million BTU compared to the natural gas city gate price of \$3.07 per million BTU.

With respect to the industrial sector, which accounts for nearly 13 percent of resid demand on an annual basis, the most recent government statistics continue to indicate increasing strength. During January, the index of industrial production rose 4.7 percent, slightly stronger than the 1993 fourth quarter increase of 4.2 percent.

Other Oils

UP 4 PERCENT FOR THE MONTH.

Growth in deliveries of "other oils" was not as strong in February as January's 13 percent increase. Nevertheless, February's deliveries for this group of products still rose 4 percent, in part reflecting the effects of cold weather on demand for liquefied petroleum gases. Results for last year as a whole had shown a modest net decline.

The largest single contributor to last year's 0.8 percent deliveries drop, according to recently-released full-year data for 1993 from the Department of Energy, was liquefied petroleum gases' 2.4 percent decline. Deliveries of petroleum coke, subsiding about 5 percent after an unusual surge the prior year, also contributed to the decrease. As for petrochemical feedstocks, deliver-

ies of ethane and gasoil each rose roughly 3 percent, or about 25 thousand B/D in total, but this was nearly offset by a 10 percent, 20 thousand B/D drop for deliveries of naphtha-based feedstocks. Asphalt deliveries gained close to 5 percent to nearly match the all-time high set in 1990.

SUPPLY

Production OUTPUT FALLS 1.7 PERCENT.

Domestic crude oil production fell 115 thousand B/D, or 1.7 percent for February. Alaskan output declined 2.1 percent, or about 35 thousand B/D, following January's modest increase, which had been the first year-to-year rise in a little over two years. In the lower 48, crude oil production slipped about 80 thousand B/D or 1.5 percent versus one year earlier.

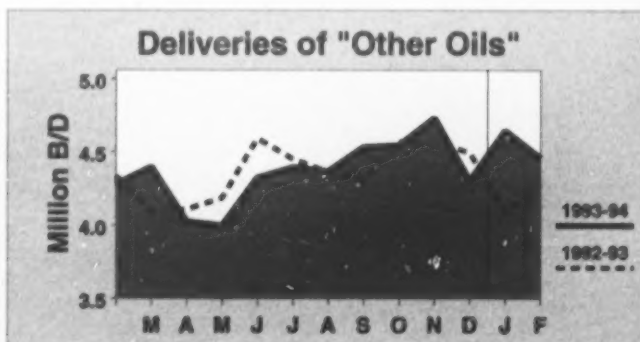
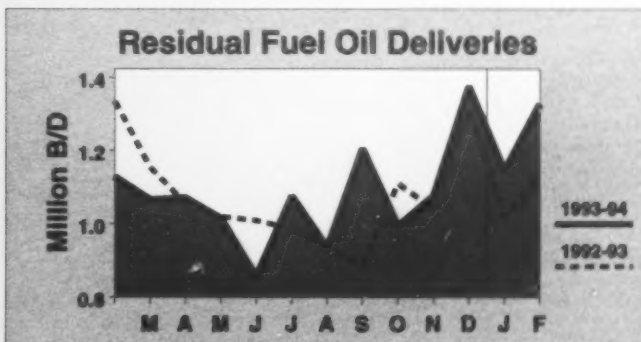
According to recent data published by the Association of Oilwell Servicing Contractors, the servicing of existing oil and gas wells actually increased in 1993, by 13 percent to nearly 3,160 rigs active. As with the drilling of new wells, gas activity more than oil activity was responsible for the increase. Despite the increase over 1992 levels, last year's average still fell short of levels two years ago.

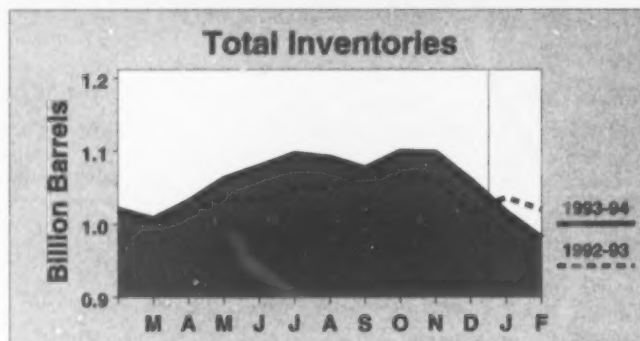
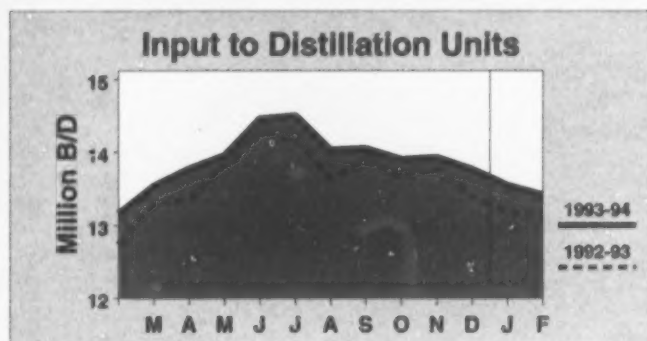
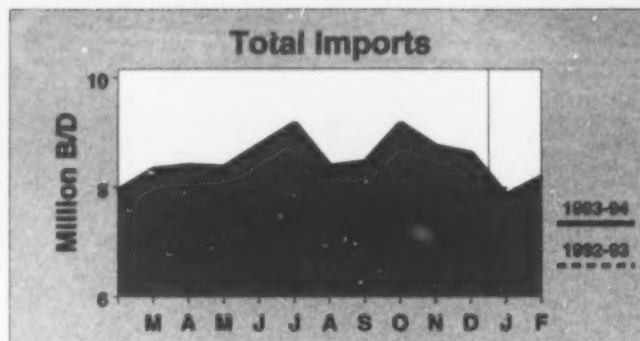
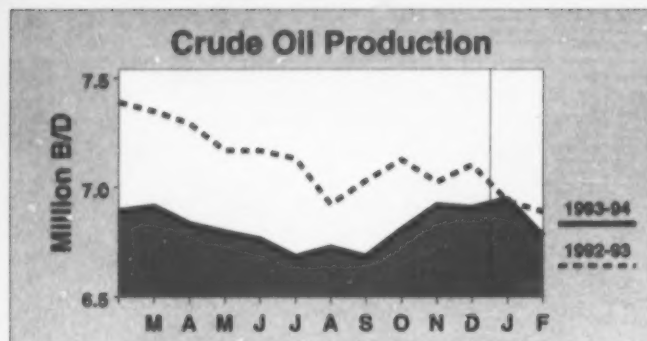
Imports

MODEST RISE, DESPITE STRONG DELIVERIES.

Although February total imports of crude oil and refined products returned to its pattern of growth, the 237 thousand B/D, 3.0 percent increase was more modest than what would be implied by the continuing divergence between domestic supply and demand. However, with the 1.3 million B/D draw in inventories during February substantially filling the gap, the year-to-year growth in imports was constrained. Given that domestic crude production continues to trend downward while consumption of refined products trends upward, the need for imports does not appear to be diminishing.

During February, imports of refined products jumped nearly 13 percent year-to-year while crude oil imports remained flat. Imports of residual fuel oil, which had not surpassed the 500 thousand B/D level since December 1991, had the largest year-to-year gain, increasing by 183 thousand B/D during February to 508 thousand B/D. Distillate imports increased by nearly 28 percent from their year-ago levels to 286 thousand B/D. Imports of motor gasoline at 291 thousand B/D increased by nearly 35 percent from their year-ago level.





Refinery Operations

DISTILLATE OUTPUT CONTINUES TO SURGE.

With strong deliveries of distillate fuel oil continuing in February, output of this product continued at high levels as well. The month's distillate fuel oil output rose more than 13 percent from a year ago to nearly 3.2 million B/D, its highest February level in seventeen years. Low sulfur diesel accounted for 47 percent of refinery distillate output, or about 1.5 million B/D. Strong blending demand for kerosine jet fuel continued into February as well, resulting in a three-year February high for production of that product. February's kerosine jet fuel output rose 4.0 percent to nearly 1.4 million B/D.

Although gasoline output as a whole slipped 3.5 percent from a year ago, oxygenated fuel production was up over 25 percent, to 1.6 million B/D, in order to meet greater requirements this season compared with last. Residual fuel production fell 3.4 percent.

The gain for overall refinery activity was less dramatic than for individual products such as distillate and kerosine jet fuel. Input to distillation units rose 1.9 percent from last February, and utilization averaged 88.6 percent for the month. This was up close to two points from last February's 86.9 percent.

Inventories

35 MILLION BARREL DRAWDOWN NEARLY TRIPLES THE AVERAGE.

In February, total stocks fell substantially for the second month in a row. The 35 million barrel drop was nearly three times the average stock draw for the month. As a result of the past two months' drawdown, month-end inventories fell from 1.03 billion at the end of December, their highest December level in six years, to 980 million barrels at the end of February, the lowest for the month in twenty years.

Declines for crude oil and most major products contributed to the drop. Crude oil inventories fell 3 million barrels to 331 million barrels, a level roughly 5 million barrels below average for the month. Distillate stocks fell at only about half the unusually large rate of January. Their February drop of 14 million barrels was more or less in line with typical experience for the month. Unlike January's decline, of which high-sulfur stocks accounted for the largest share, February's was nearly evenly split between high and low sulfur diesel. At 104 million barrels, month-end distillate stocks were down slightly from typical levels.

With refineries concentrating on distillate and kerosine jet fuel production, gasoline inventories slipped 6 million barrels to 227 million barrels, about 10 million barrels below average for February. However, mid-winter stocks of gasoline are often the highest of the year because of seasonally weaker demand. Thus, February's gasoline stock levels were still the second highest month-end level in nearly a year. With the end of the oxygenate season nearing, stocks of oxygenated gasoline declined 10 million barrels to 17 million barrels, 5 million barrels lower than a year ago. Last year, stocks of oxygenated gasoline fell to a low of 6 million barrels by mid-year before building again in anticipation of the coming oxygenate season.

ESTIMATED UNITED STATES PETROLEUM BALANCE¹
(Daily average in thousands of 42 gallon barrels)

Disposition and Supply	February			Year-to-Date		
	1994 ²	1993 ³	% Change	1994 ⁴	1993 ³	% Change
Disposition:						
Total motor gasoline.....	7,357	7,129	3.2	7,162	6,928	3.4
Finished oxygenated.....	1,903	1,223 ^E	55.6	1,987	1,445 ^E	37.5
Finished reformulated.....	0	na	na	0	na	na
Finished other.....	5,454	5,906 ^E	(7.7)	5,175	5,483 ^E	(5.6)
Naphtha-jet.....	69	143	(51.8)	75	117	(35.9)
Kerosine-jet.....	1,480	1,346	10.0	1,483	1,359	9.1
Distillate fuel oil.....	3,827	3,479	10.0	3,964	3,301	20.1
≤ 0.05 percent sulfur.....	1,733	491 ^E	253.0	1,804	405 ^E	345.4
> 0.05 percent sulfur.....	2,094	2,988 ^E	(29.9)	2,160	2,896 ^E	(25.4)
Residual fuel oil.....	1,327	1,128	17.6	1,232	1,071	15.0
All other oils (including crude losses).....	4,459	4,277	4.3	4,556	4,180	9.0
Reclassified ⁵	-179	-103	na	-191	-125	na
Total domestic products supplied.....	18,340	17,399	5.4	18,281	16,831	8.6
Exports.....	885	1,033	(14.3)	890	1,087	(18.1)
Total disposition.....	19,225	18,432	4.3	19,171	17,918	7.0
Supply:						
Domestic liquids production:						
Crude oil (including condensate).....	6,775	6,890	(1.7)	6,864	6,941	(1.1)
Natural gas liquids.....	1,767	1,761	0.3	1,766	1,744	1.3
Other supply ⁶	1,246	1,252	(0.5)	1,202	1,325	(9.3)
Total domestic supply.....	9,788	9,903	(1.2)	9,832	10,010	(1.8)
Imports:						
Crude oil (excluding SPR imports).....	6,167	6,156	0.2	6,109	6,227	(1.9)
From Canada.....	934	782	19.4	913	780	17.1
All other.....	5,233	5,374	(2.6)	5,196	5,447	(4.6)
Products.....	2,001	1,775	12.7	1,882	1,721	9.4
Residual fuel oil.....	508	325	56.3	438	355	23.4
All other.....	1,493	1,450	3.0	1,444	1,366	5.7
Total imports.....	8,168	7,931	3.0	7,991	7,948	0.5
Total supply.....	17,956	17,834	0.7	17,823	17,958	(0.8)
Stock change, all oils.....	-1,269	-598	na	-1,348	+40	na
Refinery Operations:						
Input to crude distillation units.....	13,414	13,161	1.9	13,486	13,169	2.4
Operable capacity.....	15,145	15,140	0.0	15,145	15,142	0.0
Refinery utilization ⁷	88.6	86.9	na	89.0	87.0	na
Crude oil runs.....	13,190	12,923	2.1	13,232	12,953	2.2

	February 1994	January 1994	February 1993	% Change From	
				Month Ago	Year ago
Stocks (at month-end, in millions of barrels):					
Crude oil (excluding SPR stocks).....	330.5	333.4	331.3	(0.9)	(0.2)
Unfinished oils.....	105.1	99.9	99.7	5.2	5.4
Total motor gasoline.....	227.0	233.2	241.6	(2.7)	(6.0)
Finished oxygenated.....	17.4	27.8	23.0	(37.4)	(24.4)
Finished reformulated.....	0.0	0.0	na	na	na
Finished other.....	164.2	162.6	176.8	1.0	(7.1)
Blending components.....	45.4	42.8	41.8	6.1	8.6
Naphtha-jet.....	1.9	2.5	4.5	(24.0)	(57.8)
Kerosine-jet.....	37.5	38.0	37.8	(1.3)	(0.8)
Distillate fuel oil.....	104.2	118.6	109.4	(12.1)	(4.8)
≤ 0.05 percent sulfur.....	46.4	52.9	15.6	(12.3)	197.4
> 0.05 percent sulfur.....	57.8	65.7	93.8	(12.0)	(38.4)
Residual fuel oil.....	41.6	44.2	42.1	(5.9)	(1.2)
All other oils.....	131.7	145.2 ^R	152.9	(9.3)	(13.9)
Total all oils.....	979.5	1,015.0 ^R	1,019.3	(3.5)	(3.9)

1—Total supply, i.e., production plus imports adjusted for net stock change is equal to total disposition from primary storage. Total disposition from primary storage less exports equals total domestic products supplied. Information contained in this report is derived from information published in the API *Weekly Statistical Bulletin* and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions. 2—Based on API estimates; data converted to a monthly basis. 3—Source: U.S. Energy Information Administration (including any adjustments). 4—Data for most current two months are API estimates. Other data come from U.S. Energy Information Administration (including any adjustments). 5—An adjustment to avoid double counting resulting from differences in product classifications among different refineries and blenders. 6—Includes unaccounted-for crude oil, withdrawals from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol, and downstream blending of ethanol. 7—Represents "input to crude oil distillation units" as a percent of "Operable capacity". R—Revised. E—Estimated. na—Not available.